ARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION



As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is invented and for which a patent is sought on the invention entitled <u>METHODS FOR DETECTING TARGET ANALYTES AND ENTAGED REACTIONS</u>, the specification of which

| the specificat: | ion of which | Mr. Sile |
|---------------------|---|----------------|
| OIP E voja (check | is attached hereto. | OFFICE OF 2002 |
| MAR 0 4 2002 E one) | | A PET |
| ` 2 | x was filed on <u>March 23, 2001</u> as | PATTON |
| True st | Application Serial No. 09/816,651 | |
| The POANEMARK | and was amended on | |
| | (if applicable) | |

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

| Prior Foreign Application(s) | | | | Claimed | |
|------------------------------|-----------|------------------------|-----|---------|--|
| | | | | | |
| (Number) | (Country) | (Day/Month/Year Filed) | Yes | No | |
| | | | | | |
| (Number) | (Country) | (Day/Month/Year Filed) | Yes | No | |

I hereby claim the benefit under Title 35, United States Code, §120 and §119 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose to the Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| 09/450,829 | November 29, 1999 | Granted |
|--------------------------|--------------------|--------------------------|
| (Application Serial No.) | (Filing Date) | (Status) |
| | (paten | ted, pending, abandoned) |
| 09/786,896 | September 10, 1999 | Pending |
| (Application Serial No.) | (Filing Date) | (Status) |
| | (paten | ted, pending, abandoned) |
| 09/151,877 | September 11, 1998 | Pending |
| (Application Serial No.) | (Filing Date) | (Status) |
| | (paten | ted, pending, abandoned) |

(Application Serial No.)

(Filing Date)

(Status)

(patented, pending, abandoned)

I hereby appoint the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Harold C. Hohbach, Reg. No. 17,757; Aldo J. Test, Reg. No. 18,048; Donald N. MacIntosh, Reg. No. 20,316; Edward S. Wright, Reg. No. 24,903; David J. Brezner, Reg. No. 24,774; Robert B. Chickering, Reg. No. 24,286; Richard F. Trecartin, Reg. No. 31,801; Edward N. Bachand, Reg. No. 37,085, R. Michael Ananian, Reg. No. 38,050, Robin M. Silva, Reg. No. 38,304; Michael A. Kaufman, Reg. No. 32,988; Maria S. Swiatek, Reg. No. 37,244; Todd A. Lorenz, Reg. No. 39,754; David C. Foster, Reg. No. 44,685; provided that if any one of said attorneys ceases being affiliated with the law firm of Flehr, Hohbach, Test, Albritton & Herbert as partner, employee or of counsel, such attorney's appointment as attorney and all powers derived therefrom shall terminate on the date such attorney ceases being so affiliated.

Direct all telephone calls to <u>Robin M. Silva</u> at (415) 781-1989.

Address all correspondence to:

FLEHR HOHBACH TEST

ALBRITTON & HERBERT LLP

Suite 3400, Four Embarcadero Center

San Francisco, California 94111

, File No. A-67209-4/DJB/RMS/DCF

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| Full name first | · | |
|-----------------------|---|---|
| inventor: | David R. Walt | _ |
| Inventor's signature: | And Now | _ |
| Date: | 1/17/02 | |
| Residence: | Lexington, MA | _ |
| Citizenship: | USA 0242 | _ |
| Post Office Address: | 4 Candlewick Close, Lexington, MA | _ |
| | | _ |
| | | |
| Full name of second | | |
| inventor: | Karri Lynn Michael | |
| Inventor's signature: | | |
| Date: | | |
| Residence: | Austin, TX | |
| Citizenship: | USA | |
| - | 6280 McNeill Drive #404, Austin, TX 78729 | |
| | | |
| | | _ |

1058897

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled <u>METHODS FOR DEFECTING TARGET ANALYTES AND ENZYMATIC REACTIONS</u>, the specification of which

| MAR 0 & 2002 W (check one) | is attached hereto. |
|----------------------------|---|
| TRADEMINE X | was filed on March 23, 2001 as Application Serial No. 09/816,651 and was amended on (if applicable) |

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

| Prior Foreign Application(s) | | | Priority | <u>Claimed</u> |
|------------------------------|-----------|------------------------|----------|----------------|
| | | | | |
| (Number) | (Country) | (Day/Month/Year Filed) | Yes | No |
| | | | | |
| (Number) | (Country) | (Day/Month/Year Filed) | Yes | No |

I hereby claim the benefit under Title 35, United States Code, §120 and §119 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose to the Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| 09/450,829 | November 29, 1999 | Granted |
|--------------------------|--------------------|--------------------------|
| (Application Serial No.) | (Filing Date) | (Status) |
| | (patent | ted, pending, abandoned) |
| 09/786,896 | September 10, 1999 | Pending |
| (Application Serial No.) | (Filing Date) | (Status) |
| | (patent | ted, pending, abandoned) |
| 09/151,877 | September 11, 1998 | Pending |
| (Application Serial No.) | (Filing Date) | (Status) |
| | (patent | ted, pending, abandoned) |

| 08/818,199 | March 24, 1997 | Granted | |
|--------------------------|----------------|----------------------------|--|
| (Application Serial No.) | (Filing Date) | (Status) | |
| | 12 | atented pending shandoned) | |

I hereby appoint the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Harold C. Hohbach, Reg. No. 17,757; Aldo J. Test, Reg. No. 18,048; Donald N. MacIntosh, Reg. No. 20,316; Edward S. Wright, Reg. No. 24,903; David J. Brezner, Reg. No. 24,774; Robert B. Chickering, Reg. No. 24,286; Richard F. Trecartin, Reg. No. 31,801; Edward N. Bachand, Reg. No. 37,085, R. Michael Ananian, Reg. No. 38,050, Robin M. Silva, Reg. No. 38,304; Michael A. Kaufman, Reg. No. 32,988; Maria S. Swiatek, Reg. No. 37,244; Todd A. Lorenz, Reg. No. 39,754; David C. Foster, Reg. No. 44,685; provided that if any one of said attorneys ceases being affiliated with the law firm of Flehr, Hohbach, Test, Albritton & Herbert as partner, employee or of counsel, such attorney's appointment as attorney and all powers derived therefrom shall terminate on the date such attorney ceases being so affiliated.

Direct all telephone calls to Robin M. Silva at (415) 781-1989.

Address all correspondence to:

FLEHR HOHBACH TEST

ALBRITTON & HERBERT LLP

Suite 3400, Four Embarcadero Center

San Francisco, California 94111

File No. A-67209-4/DJB/RMS/DCF

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name first inventor: David R. Walt Inventor's signature: _ Date: Residence: _Lexington, MA Citizenship: USA Post Office Address: 4 Candlewick Close, Lexington, MA 02173 Full name of second inventor: Karri Lynn Michael Inventor's signature: 12-21-01 Date: Residence: Austin, TX Citizenship: USA Post Office Address: 6280 McNeill Drive #404, Austin, TX 78729

1058897

ASSIGNMENT

(NOT ACCOMPANYING APPLICATION)

| WHEREAS, the undersigned, | |
|---|--|
| (1) David R. WALT | (2) Karri L. MICHAEL |
| | |
| (hereinafter termed "Inventors"), residents of | |
| (1) Lexington | (2) Austin |
| | |
| respectively, Counties of | |
| (1) Middlesex , | (2) <u>Travis</u> , |
| | |
| respectively, States of | |
| (1) Massachusetts, | (2) <u>Texas</u> , |
| | |
| respectively, have invented certain new and usef | ul improvements in |
| | |
| METHODS FOR DETECTING TARGET AN | NALYTES AND ENZYMATIC REACTIONS |
| | |
| and have executed an application for a United St | ates patent disclosing and identifying the |
| invention on even date herewith; and having Seri | al No. <u>09/816,651</u> and filing date of |
| March 23, 2001; and | |
| | |
| WHEREAS, The Trustees of Tufts Co. | llege a corporation of the State of |
| Masachusetts , having a place of busines | s at <u>Tufts University, Medford</u> , State of |
| Massachusetts, (hereinafter termed "Assig | gnee"), is desirous of acquiring the entire right, |
| title and interest in and to said application and the | e invention disclosed therein, and in and to all |
| embodiments of the invention, heretofore conceiv | ved, made or discovered jointly or severally by |
| said Inventors (all collectively hereinafter termed | "said invention"), and in and to any and all |
| patents, inventor's certificates and other forms of | protection (hereinafter termed "patents") |
| thereon granted in the United States and foreign | countries. |
| NOW, THEREFORE, in consideration of | good and valuable consideration acknowledged |
| by said Inventors to have been received in full fro | om said Assignee: |
| 1. Said Inventors do hereby sell, assi | ign, transfer and convey unto said Assignee, |

the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and

any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.

- 2. Said Inventors hereby jointly and severally covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.
- 3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventors, their respective heirs, legal representatives and assigns.
- 4. Said Inventors hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Inventors have executed and delivered this instrument to said Assignee as follows:

| Date: | 1/11/02 | (1) | David R. Walt | |
|---|--|-------------------|--|-----|
| County of | middlesex | ١ | | |
| | Massachusetts | ,)) ss. .) | | |
| | • | • | | |
| | | | 200%, before me, Camela A. Lucus | _ |
| Notary Pu | iblic of the State of M | assachusatts, | personally appeared (1) <u>David R. Walt</u> | |
| | | | sis of satisfactory evidence) to be the person | |
| | | | and acknowledged that he/she executed the | ne |
| | | | y his/her signature on the instrument the | |
| | • | | on acted, executed the instrument. | |
| WIT | NESS my hand and of | ficial seal. | · | |
| Signature | Jamel A. d. | ncar | (Sea | al) |
| | | | | |
| | | | | |
| Date [.] | | (2) | · | |
| | | (2) | Karri Lynn Michael | |
| County of | | ,) | | |
| | | ,)) ss. \ | | |
| State of | | .) | · | |
| | | | 2001 , before me, | _, |
| | | | ersonally appeared (2) <u>Karri Lynn Michael</u> | |
| - · · · · · · · · · · · · · · · · · · · | • • | | sis of satisfactory evidence) to be the perso | |
| | | | and acknowledged that he/she executed the | ıe |
| | • | | y his/her signature on the instrument the | |
| | the entity upon behalf NESS my hand and off | • | n acted, executed the instrument. | |
| Signature _. | | | (Sea | al) |
| | | | | |
| | | | | |

1067044

ASSIGNMENT

(NOT ACCOMPANYING APPLICATION)

| WHEREAS, the undersigned, | |
|---|---|
| (1) <u>David R. WALT</u> , | (2) Karri L. MICHAEL |
| () | |
| (hereinafter termed "Inventors"), residents of | |
| (1) Lexington | (2) Austin |
| respectively, Counties of | |
| (1) Middlesex , | (2) <u>Travis</u> |
| respectively, States of | |
| (1) Massachusetts, | (2) Texas |
| respectively, have invented certain new and usefu | |
| and have executed an application for a United State invention on even date herewith; and having Seria March 23, 2001; and | • |
| WHEREAS,The Trustees of Tufts Coll | ege a corporation of the State of |
| <u>Masachusetts</u> , having a place of business | at <u>Tufts University, Medford</u> , State of |
| <u>Massachusetts</u> , (hereinafter termed "Assig | nee"), is desirous of acquiring the entire right, |
| title and interest in and to said application and the | invention disclosed therein, and in and to all |
| embodiments of the invention, heretofore conceiv | ed, made or discovered jointly or severally by |
| said Inventors (all collectively hereinafter termed ' | 'said invention"), and in and to any and all |
| patents, inventor's certificates and other forms of | protection (hereinafter termed "patents") |
| thereon granted in the United States and foreign o | countries. |
| NOW, THEREFORE, in consideration of g | ood and valuable consideration acknowledged |
| by said Inventors to have been received in full from | m said Assignee: |

1. Said Inventors do hereby sell, assign, transfer and convey unto said Assignee, the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and

| Date: | (1) David R. Walt |
|-----------------------------------|--|
| | David R. Walt |
| County of | ,) |
| State of | ,)) ss. .) |
| On this day of | , in the year <u>2001</u> , before me, |
| Notary Public of the State of | , personally appeared (1) <u>David R. Walt</u> |
| | d to me on the basis of satisfactory evidence) to be the person |
| whose name is subscribed to the | within instrument, and acknowledged that he/she executed the |
| same in his/her authorized capac | ity(ies), and that by his/her signature on the instrument the |
| person, or the entity upon behalf | of which the person acted, executed the instrument. |
| WITNESS my hand and of | cial seal. |
| 0: / | |
| Signature | ······································ |
| | |
| | |
| Date: 12 - 20 - 01 | (2) Karri Lynn Michael |
| County of | ,)) ss. |
| State of | .) |
| On this 20th day of | , in the year <u>2001</u> , before me, <u>Karri Michael</u> |
| | , personally appeared (2) Karri Lynn Michael |
| personally known to me (or prove | d to me on the basis of satisfactory evidence) to be the person |
| whose name is subscribed to the | within instrument, and acknowledged that he/she executed the |
| same in his/her authorized capac | ty(ies), and that by his/her signature on the instrument the |
| person, or the entity upon behalf | of which the person acted, executed the instrument. |
| WITNESS my hand and off | cial seal. |
| | () Vight |
| Signature <u>fam i c</u> | V. K. GUPTA (Seal) |
| ' ' | Notery Public, Blade of Tenase My Controlledon Explices DEC. 8, 2004 |
| | |



Creation date: 20-07-2003

Indexing Officer: VKIM1 - VANNAROTH KIM

Team: OIPEBackFileIndexing

Dossier: 09816651

Legal Date: 04-04-2002

| No. | Doccode | Number of pages |
|-----|---------|-----------------|
| 1 | A | 2 |
| 2 | SPEC | 1 |
| 3 | REM | 1 |
| 4 | XT/ | 2 |
| 5 | AF/D | 3 |
| 6 | PET. | 2 |
| 7 | LET. | 4 |

| Total number of pages: 15 |
|----------------------------|
| Remarks: |
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